## XXV European Cosmic Ray Symposium



Contribution ID: 70

Type: oral

## Particle physics aspects in air shower measurements with the Pierre Auger Observatory

Thursday, 8 September 2016 17:00 (15 minutes)

Ultrahigh energy cosmic ray air showers probe particle physics at energies beyond the reach of accelerators. We will present the different approaches to determine air shower observables relevant for testing hadronic interactions, e.g. for a given primary energy and composition, the number of muons is sensitive to hadronic interactions. We will explain the systematic uncertainties to eventually quantify discrepancies between recorded and simulated data.

Primary author: Dr ROTH, Markus (KIT)
Co-author: THE PIERRE AUGER, Collaboration (Observatorio Pierre Auger)
Presenter: Dr ROTH, Markus (KIT)
Session Classification: Parallel